

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A data structure for data storage in a machine readable medium, the data structure comprising a parent node and a plurality of children nodes of the parent node, wherein:

the parent node comprises:

a first pointer always pointing to a child node that was last traversed from the parent node in data access;

the children node are linked in an order where each child node comprises at least one of:

a second pointer pointing to a next child node in the order; and

a third pointer pointing to a previous child node in the order.

Claim 2 (previously presented): The data structure of claim 1, wherein:

the parent node further comprises:

a fourth pointer pointing to a first child node in the order; and

a fifth pointer pointing to a last child node in the order.

Claims 3 to 5 (canceled).

Claim 6 (currently amended): A method for creating a data structure for data storage in a machine readable medium, the data structure comprising a parent node and a plurality of children nodes of the parent node, the method comprising:

for the parent node, creating:

first and second pointers pointing to two of the children nodes; and

a third pointer for pointing to a last traversed child node from the parent node in data access;

linking the children node in an order, comprising, creating for each child node at least one of:

- a fourth pointer pointing to a next child node in the order; and
- a fifth pointer pointing to a previous child node in the order;

accessing a data from the data structure by traversing at least one of the children nodes; and

for the parent node, updating the third pointer to point to the last traversed child node in said accessing a data.

Claim 7 (canceled).

Claim 8 (original): The method of claim 6, wherein the first pointer points to a first child node in the order and the second pointer points to a last child node in the order.

Claims 9 to 15 (canceled).

Claim 16 (previously presented): The method of claim 6, further comprising:

retrieving another data from the data structure, comprising:

- determining which one of the first, the second, and the third pointers has a shortest path to said another data;
- following said one of the first, the second, and the third pointers to the children nodes; and
- traversing at least another one of the children nodes to retrieve said another data; and

for the parent node, updating the third pointer to point to the last traversed child node in said retrieving another data.